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10/057,112	01/25/2002	Kurt Oster	45579/56876	1887

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EXAMINER

MILLER, CHERYL L

ART UNIT

PAPER NUMBER

3738

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/057,112

Applicant(s)

OSTHER ET AL.

Examiner

Cheryl Miller

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 29-33,39-42 and 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-33,39-42 and 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 3738

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of species with traverse of Species 1, shown in figure 1 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that Species 2 is encompassed within the scope of Species 1 and no burden exists to examine species 2. This is found persuasive and the *election of species requirement* is *withdrawn*. (However, since claims 34-38 were cancelled by the applicant in the amendment of paper 6, they have not been examined and are not addressed in the present office action) The *restriction requirement* is still deemed proper and is made FINAL.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 30 is a Markush type claim and should contain the language --selected from the group consisting of-- following the recitations "collagen protein", "proteoglycan", and "non-collageneous protein".

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

Art Unit: 3738

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 29-33, 39-42, and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. (USPN 6,306,169 B1). Referring to claim 29, Lee discloses a cartilage membrane (implant, first matrix, col.1, lines 10-12) comprising at least one surface part carrying a composition (first matrix or second matrix) comprising at least one stimulation molecule (coating, col.5, lines 16-24; col.6, lines 19-21), which induces a signal transduction in chondroblast/chondrocytes and which is selected from collagen proteins, proteoglycans, and non-collageneous proteins.

Referring to claims 30, 39, 40, and 41, Lee discloses a stimulation molecule comprising at least one RGD motif, and being a protein, collagen or fibronectin (col.5, lines 16-24).

Referring to claim 31, Lee discloses a membrane that is non-immunogenic, non-toxic, and biodegradable (col.5, lines 3-4).

Referring to claim 32, Lee discloses a porous membrane (col.5, lines 28-40).

Referring to claim 33, Lee discloses a collagen type I membrane or part thereof (col.12, line 7).

Referring to claim 42, Lee discloses a stimulation molecule attached to a support (the support being the first matrix or the second matrix).

Referring to claim 52, Lee discloses a kit for cartilage repair (col.1, lines 10-12, also examples) comprising a cartilage membrane (implant, first matrix) that comprises at least one surface part carrying a composition (first matrix or second matrix) comprising at least one stimulation molecule (coating, col.5, lines 16-24; col.6, lines 19-21), which induces a signal

Art Unit: 3738

transduction in chondroblast/chondrocytes and which is selected from collagen proteins, proteoglycans, and non-collageneous proteins.

Claims 29-33, 39-42, and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Vibe-Hansen et al. (USPN 5,989,269, cited by applicant in IDS). See figure 3C, respective portions of the specification, and all examples. Referring to claim 29, Vibe-Hansen discloses a cartilage membrane (1 or 2) comprising at least one surface part carrying a composition comprising at least one stimulation molecule (Tisseel, col.6, lines 45-55), which induces a signal transduction in chondroblast/chondrocytes and which is selected from collagen proteins, proteoglycans, and non-collageneous proteins.

Referring to claims 30, 39, 40, and 41, Vibe-Hansen discloses a stimulation molecule comprising at least one RGD motif, and being a protein, collagen or fibronectin (col.6, lines 52-55, because it contains fibronectin and protein, this inherently will have a RGD motif).

Referring to claim 31, Vibe-Hansen discloses a membrane that is non-immunogenic, non-toxic, and biodegradable (col.8, lines 46-47).

Referring to claim 32, Vibe-Hansen discloses a porous membrane (col.3, lines 8-12; col.8, lines 56-57).

Referring to claim 33, Vibe-Hansen discloses a collagen type I membrane or part thereof (BioGide, col.5, lines 29-31; col.8, line 57).

Referring to claim 42, Vibe-Hansen discloses a stimulation molecule attached to a support (Tisseel attached to a support, support being sutures or the Bio Gide, col.8, lines 61-63).

Referring to claim 52, Vibe-Hansen discloses a kit for cartilage repair (col.3, lines 25-30) comprising a cartilage membrane (1 or 2) that comprises at least one surface part carrying a

Art Unit: 3738

composition comprising at least one stimulation molecule (Tisseel, col.6, lines 45-55, or collagen II), which induces a signal transduction in chondroblast/chondrocytes and which is selected from collagen proteins, proteoglycans, and non-collageneous proteins.

Claims 29-31, 39-42, and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Minuth (USPN 6,187,053 B1). Referring to claim 29, Minuth discloses a cartilage membrane (4) comprising at least one surface part carrying a composition (10) comprising at least one stimulation molecule (proteins, col.3, lines 15-32), which induces a signal transduction in chondroblast/chondrocytes and which is selected from collagen proteins, proteoglycans, and non-collageneous proteins.

Referring to claims 30, 39, 40, and 41, Minuth discloses a stimulation molecule comprising at least one RGD motif, and being a protein, collagen or fibronectin (col.3, lines 15-32, because it contains fibronectin and protein, this inherently will have a RGD motif).

Referring to claim 31, Minuth discloses a membrane (4) that is non-immunogenic, non-toxic, and biodegradable (col.3, lines 33-35; col.1, lines 9-10, 35-37).

Referring to claim 42, Minuth discloses a stimulation molecule attached to a support (8 or 6).

Referring to claim 52, Minuth discloses a kit for cartilage repair comprising a cartilage membrane (4) that comprises at least one surface part carrying a composition (10) comprising at least one stimulation molecule (proteins, col.3, lines 15-32), which induces a signal transduction in chondroblast/chondrocytes and which is selected from collagen proteins, proteoglycans, and non-collageneous proteins.

Art Unit: 3738

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Miller whose telephone number is (703) 305-2812. The examiner can normally be reached on Monday through Friday from 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on (703) 308-2111. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Cheryl Miller

July 23, 2003



BRUCE SNOW  
PRIMARY EXAMINER